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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/752,284	12/29/2000	Min Zhu	M-8861 US	9176	
75	90 04/19/2004	EXAMINER			
Philip W. Woo			SHAW, JOSEPH D		
c/o SIDLEY AUSTIN BROWN & WOOD LLP 555 CALIFORNIA STREET			ART UNIT	PAPER NUMBER	
SUITE 5000			2141	÷,	
SAN FRANCIS	SCO, CA 94104-1715	5	DATE MAILED: 04/19/2004	<i>7.</i> : ,	

Please find below and/or attached an Office communication concerning this application or proceeding.

				PRG			
•		Application No.	Applicant(s)				
		09/752,284	ZHU ET AL.				
Office Action Summary		Examiner	Art Unit				
		Joseph D Shaw	2141				
Period fo	The MAILING DATE of this communication apport Reply	ears on the cover sheet with	the correspondence add	lress			
THE - Exte after - If the - If NC - Failt Any	MAILING DATE OF THIS COMMUNICATION. MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1.13 IT SIX (6) MONTHS from the mailing date of this communication. It is period for reply specified above is less than thirty (30) days, a reply of period for reply is specified above, the maximum statutory period was the toreply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing led patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a repl within the statutory minimum of thirty (will apply and will expire SIX (6) MONTH cause the application to become ABAN	ly be timely filed 30) days will be considered timely. IS from the mailing date of this cor NDONED (35 U.S.C. § 133).				
Status							
1)🛛	Responsive to communication(s) filed on 29 De	<u>ecember 2000</u> .					
2a) <u></u>	•	action is non-final.					
3)[_]							
	closed in accordance with the practice under E	x parte Quayle, 1935 C.D.	11, 453 O.G. 213.	· ·			
Disposit	ion of Claims			,			
5)□ 6)⊠ 7)□	Claim(s) <u>1-20</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) <u>1-20</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or	vn from consideration.					
Applicat	ion Papers						
10)⊠	The specification is objected to by the Examine The drawing(s) filed on <u>19 September 2001</u> is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	are: a) \square accepted or b) \boxtimes drawing(s) be held in abeyance ion is required if the drawing(s)	e. See 37 CFR 1.85(a).) is objected to. See 37 CFI	R 1.121(d).			
Priority	under 35 U.S.C. § 119						
а)	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document: 2. Certified copies of the priority document: 3. Copies of the certified copies of the priority document: application from the International Bureau See the attached detailed Office action for a list	s have been received. s have been received in Apprity documents have been re u (PCT Rule 17.2(a)).	olication No eceived in this National S	Stage			
2) Notice 3) Infor	nt(s) ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) rmation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) er No(s)/Mail Date 4.		Mail Date ormal Patent Application (PTO	-152)			

Art Unit: 2141

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR $1.130\,(b)$.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

- 2. Claims 1, 6, 11, and 16 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 4, 7, and 10 of U.S. Patent No. 6,567,813. Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitation of the communicating employing a secure protocol on a dedicated network is an obvious modification. Distributed and parallel computing environments frequently employ logical processes on separate nodes communicating over a dedicated network and communications via a secure protocol is well known in the art to ensure information is transmitted securely.
- 3. Claims 1, 6, 11, and 16 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 5, 9, and 13 of copending Application No. 09/752,376, claims 1, 7, 13, and 19 of copending Application No. 09/751,595, and claims 1, 5, 9,

Page 3

Application/Control Number: 09/752,284

Art Unit: 2141

and 13 of copending Application No. 09/751,519. Although the conflicting claims are not identical, they are not patentably distinct from each other because employing a secure protocol on a dedicated network is an obvious modification. Distributed and parallel computing environments frequently employ logical processes on separate nodes communicating over a dedicated network and communications via a secure protocol is well known in the art to ensure information is transmitted securely.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Specification

4. The abstract of the disclosure is objected to because the abstract makes no reference to claimed subject matter. In particular, the claimed subject matter is related to partitioning collaboration functions into subfunctions and communicating amongst the sub functions securely. The abstract appears to be directed to a fault-tolerant collaborative computer system. Correction is required. See MPEP § 608.01(b).

Drawings

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the secure protocol, encryption, compression, and TCP/IP messages employing a proprietary message syntax must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Art Unit: 2141

Claim Objections

6. Claims 4, 9, 14, and 19 are objected to because of the following informalities:

a. Claim is made to a TCP/IP message that employs a proprietary message syntax. This is a contradiction. A TCP/IP message has a well-defined message format that does not employ proprietary message formats for data communication. Appropriate correction is required.

Claim Rejections - 35 USC § 112

- 7. The following is a quotation of the first paragraph of 35 U.S.C. 112:
 - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 8. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.
 - b. As per claims 1, 6, 11, and 16, while the specification teaches that the employed high-speed link offers higher security, the specification fails to teach secure protocols in general.
 - c. As per claims 2, 5, 7, 10, 12, 15, 17, and 20, the specification fails to teach the use of encryption.
 - d. As per claims 3, 5, 8, 10, 13, 15, 18, and 20, the specification fails to teach the use of compression.
 - e. As per claims 4, 9, 14, and 19, while the specification teaches a proprietary protocol transported over TCP connections, the

Art Unit: 2141

specification fails to teach TCP/IP messages employing a proprietary message syntax.

Claim Rejections - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claims 1, 4, 6, 9, 11, 14, 16, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy et al. (6,185,695).
 - f. As per claim 1, Murphy teaches a distributed system (collaborative computing environment) comprising:

partitioning a collaboration function into sub-functions (kernel and user domains; col. 3, lines 54-62);

assigning at least one of said sub-functions to each of a plurality of logical processes (each node has one or more domains; Fig. 1; col. 3, lines 54-62);

associating a respective management process with each of said plurality of logical processes, said logical processes configured so that each said logical process is capable of communicating with every other said logical process through said respective management process (objects can be invoked by a thread within a domain in another node; col. 4, lines 10-14; object request broker (ORB) handles remote procedure calls for objects requested in a remote domain, on the same node or different nodes; col. 4, lines 22-30);

Art Unit: 2141

communicating between said logical processes using said respective management process (objects can be invoked by a thread within a domain in another node; col. 4, lines 10-14; object request broker (ORB) handles remote procedure calls for objects requested in a remote domain, on the same node or different nodes; col. 4, lines 22-30); and

monitoring said respective management processes with a single supervisor process (replica manager system process will detect failures when nodes are unresponsive and initiates a chain of events to have client nodes try a secondary server to complete the object invocation request; col. 4, line 56 - col. 5, line 9).

However, the Murphy invention does not explicitly teach the communications being employed by a secure protocol over a dedicated network. "Official Notice" is taken that both the concept and advantages of both secure protocols and dedicated networks were well known and expected in the art at the time of the invention.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Murphy invention to employ a secure protocol over a dedicated network for communications because secure protocols prevent unauthorized individuals from hijacking data that is being communicated and a dedicated networks ensures that all resources on the network are being employed for the communication of the data and not being wasted performing other activities.

g. Claims 6, 11, and 16 recite similar limitations to claim 1 and are rejected on the same grounds as claim 1.

Art Unit: 2141

h. As per claim 4, Murphy discloses the invention modified above. However, the modified invention does not explicitly teach the secure protocol comprising TCP/IP messages employing a proprietary message syntax. "Official Notice" is taken that both the concept and advantages of both TCP/IP and proprietary message syntaxes were well known and expected in the art at the time of the invention.

It would have been obvious to one of ordinary skill in the art at the time of the invention to include TCP/IP messages and a proprietary message syntax in the modified Murphy invention because TCP/IP is a well known and commonly used transport protocol for data communication and proprietary message syntaxes ensure that only people authorized by the developer to use the proprietary messages can understand the messages.

- i. Claims 9, 14, and 19 recite similar limitations to claim 4 and are rejected on the same grounds as claim 4.
- 11. Claims 2-3, 5, 7-8, 10, 12-13, 15, 17-18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy et al. (6,185,695), as applied to claims 1, 6, 11, and 16 above, and further in view of Derfler et al. (How Networks Work).
 - j. As per claim 2, Murphy discloses the invention modified above. However, the modified invention does not explicitly teach the secure protocol comprising encryption. Derfler teaches using encryption in data communications (page 207, paragraph 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the encryption taught by Derfler

Art Unit: 2141

in the modified Murphy invention because encryption, in practical terms, keeps all data communicated between networked devices totally private, as taught by Derfler (page 207, paragraph 1).

- k. Claims 7, 12, and 17 recite similar limitations to claim 2 and are rejected on the same grounds as claim 2.
- 1. As per claim 3, Murphy discloses the invention modified above. However, the modified invention does not explicitly teach the secure protocol comprising compression. Derfler teaches using compression in data communications (page 207, paragraph 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the compression taught by Derfler in the modified Murphy invention because compression acts as a primitive form of encryption, wherein it takes a lot more effort to hijack compressed data, as taught by Derfler (page 207, paragraph 1).

- m. Claims 8, 13, and 18 recite similar limitations to claim 3 and are rejected on the same grounds as claim 3.
- n. As per claim 5, Murphy discloses the invention modified above. However, the modified invention does not explicitly teach the secure protocol comprising encryption and compression. Derfler teaches using encryption and compression in data communications (page 207, paragraph 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the encryption and compression taught by Derfler in the modified Murphy invention because encryption,

Art Unit: 2141

in practical terms, keeps all data communicated between networked devices totally private and compression acts as a primitive form of encryption, wherein it takes a lot more effort to hijack compressed data, as taught by Derfler (page 207, paragraph 1).

However, the modified invention does not explicitly teach the secure protocol comprising a proprietary message syntax. "Official Notice" is taken that both the concept and advantages of proprietary message syntaxes were well known and expected in the art at the time of the invention.

It would have been obvious to one of ordinary skill in the art at the time of the invention to include a proprietary message syntax in the modified Murphy invention because proprietary message syntaxes ensure that only people authorized by the developer to use the proprietary messages can understand the messages.

o. Claims 10, 15, and 20 recite similar limitations to claim 5 and are rejected on the same grounds as claim 5.

Conclusion

- 12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D Shaw whose telephone number is 703-305-0094. The examiner can normally be reached on Monday Thursday and alternate Fridays, 7am 4pm.
- 13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 703-305-4003. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Page 9

Art Unit: 2141

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joseph Shaw Examiner

AU 2141

RUPAL DHARIA SUPERVISORY PATENT EXAMINER

Page 10